Connectivity for Educator Development

(ConnectED)

QUARTERLY REPORT

(April, May, June)

July 2004

1.1   BACKGROUND INFORMATION

Connect-ED is one of the several programs that fall under the Education for Development and Democracy Initiative (EDDI) that was launched by former President Bill Clinton in March 1998. Connect-ED aims to improve the quality of primary education by:

- Providing teacher training in computer skills;
- Providing Connectivity to Kyambogo University (KYU) and Primary Teachers' Colleges (PTCs);
- Enhancing the quality of teacher education through Internet connectivity; and
- Establishing Internet Points of Presence (POPs) in four rural towns to avail affordable Internet access to the local business communities.

In Uganda, the Connect-ED activity has made components of the primary teachers' teaching curriculum more available and accessible, especially to rural teachers.   It is anticipated that the delivery of primary teacher education in Uganda will be made more cost effective, through less dependence on textbooks, which if available are in short supply and out dated.

On March 25, 2000, the USAID Mission contracted AED to implement the Connect-ED activity. The primary objective of the activity was to enrich primary education through the use of new information technologies in the education system. This included development of an online curriculum for student teachers, establishing computer laboratories and Internet connectivity, and providing computer skills training to students and tutors in the Faculty of Education at KYU.   At the same time, two other US firms, namely: Computer Frontiers Inc. and WorldLearning began work to establish computer laboratories, and internet connectivity to four Primary Teacher Colleges (PTCs) around the country, and to train tutors on the use of technology in teacher training.

On April 09, 2001, the Task Order was modified to award AED full responsibility to manage the whole activity, and to enable its expansion to include four additional PTCs. Two other Task Order modifications were made on March 13, 2003, and June 27, 2003 to extend AED's contract to June 30, 2003 and September 30, 2003, respectively.

Below are the highlights of the last quarter (January – March 2004).

2.0   RESULT # 1 AND 2: OPERATING GUIDELINES AND BUSINESS PLANS

By the end of Connect-ED Phase II, it is anticipated that there would be improved policy on ICT in Education with a component for the colleges. Each of the eight PTCs would have established ICT policy and operating guidelines and reach full financial sustainability while maintaining a realistic balance between teacher training support and sustainability. A consultant (Meddy Mayanja) was hired to work with the local team on this result, make follow up meetings at each PTC and MOES to ensure policy improvement for integration of ICTs and hold meetings at each PTC to ensure that sound business plans have been written, submitted for approval and implemented.

During the last quarter, business plans were completed for four PTCs i.e. Ndegeya, Bushenyi, Canon Lawrence and Gulu PTCs.

In addition, Connect-ED held a kick off and sustainability workshop at Hotel Triangle Annex in Jinja. All the stakeholders including USAID Education Specialist Sarah Mayanja, KYU Vice Chancellor and University Secretary, Commissioner Teacher Education MOES, Chairman, Education Service Commission, Principals and Board of Governors in the eight PTCs attended the meeting. Short-term technical assistant Meddy Mayanja facilitated the workshop. Below were some of the resolutions:

- *Principals*: Constitute project management committees, including students by end of May 2004
- *Principals*: ensure expanded use of ICT by tutors, students and heads of departments report progress by end of July 2004
- *Principals*: open project bank accounts by June 2004
- *PTAs*: start revenue generating activities including charging all no-academic printing and photocopying by tutors starting May 2004
- *PTAs*: hold weekly technology demonstrations at staff lunch and break meetings starting April 2004
- *PTAs*: Develop and implement measures to control printing specifically record printing jobs by May 10, 2004
- *Consultant:* develop Operational Guide for management of ICT in PTCs by April 30, 2004 and Business plans

- Connect-ED staff: ensure rapid repairs of equipment and address connectivity problems at PTCs
- *Connect-ED office*: Work with the Commissioner Teacher Education to write to the principals explaining materials to be charged by April 23, 2004
- *Kyambogo University*: explore the process of developing ICT curriculum to Integrating ICT
- *Consultant*: Follow-up with Ministry of Education to ensure that support to the project is available by May 2005 date.
- Principals: include project activities in the regular reports to the Ministry of Education starting April 04
- Consultant: support Principals' Association to articulate issues and sensitize principals on the project -urgently

The full kick off workshop report was disseminated to all stakeholders. Follow up on the progress of workshop resolutions was made with the following results:

- A letter authorizing principals to start charging for printing: Following a meeting with Commissioner Margaret Ochen, it was agreed that the Permanent Secretary would send the letter to the principals. However, the commissioner had reservations since some of the things to pay for may be misinterpreted. The Commissioner is yet to provide feedback on this.
- A follow up on talks about ICT and use of the lab by PTAs during break teas or in the college staff room was made.
- The consultant visited Ndegeya, Shimoni, Kibuli and Bushenyi PTCs to follow up on business planning. His visit was aimed at working with each PTC to model the first four business plans that would be ready by June 16th 2004.

During the same quarter, the first draft of the operational guidelines for the PTC labs was completed. Follow up meetings were also held with Commissioner Margaret Ocen, Assistant Commissioner Margaret Nsereko and Budgeting Officer, Mr. Christopher Kaddu Buyisi and later on, the Assistant Commissioner Planning and Budgeting, Mr. Dhatemwa. During the meetings, the team shared with the MOES officials the sustainability options contained in the write up and had good discussions on each of them as follows:

Option 1:
Government increases the total grant given per student per day per term by **248/=** per student per day per term.

*******It was noted that this option wasn't feasible then due to government budgetary constraints.

Option 2:
Government reviews its policy and lets students pay computer lab fees of 22,317/= per term. *******The commissioner, Teacher Education saw this as the only option. It was agreed that the Commissioner would write to the Permanent Secretary initiating payment of user fees. And she was hoping it wouldn't contradict policy since the fee could be termed as user fees and not school fees.

The assistant commissioner, planning and budgeting noted that this option made sense economically but on ground people were poor. He felt 22,317/= was a bit high for students since most of them were from poor families. Introducing this fee would give access to the ones who were rich. He therefore proposed charging fees per user instead of a compulsory fee per term. He proposed another option where Windows similar to those being proposed for the NTCs are adopted. Under this option, government would introduce cost sharing under windows. The students who have performed well academically are fully funded under window 1 while student not academically sound are partially funded by government under window 2.

It was agreed that the Connect-ED team would write a document that would be used as a roadmap to mainstreaming Connect-ED into MOES activities. This document was written and was shared with the commissioner Teacher Education. The commissioner was expected to present the document to the Permanent Secretary who would later schedule a meeting with the Connect-ED team to discuss the document further. The meeting would be attended by, the commissioner planning, commissioner Teacher Education, VC KYU, USAID and Connect-ED Staff.

As an alternative source of funding, a suggestion was made whereby that MOES budget is made such that 200million shillings are released for the 8 PTCs in excess of the other 37 PTCs. This means that each of the 8 PTCs receives an additional 27 million over the year to cover the running costs. However, this had to be passed by the Permanent Secretary therefore it would be

discussed during the meeting with him.

The draft ICT policy in Education that was being developed and consultant Meddie Mayanja held discussions with the officer in charge and made sure that the policy clearly represents the efforts made by Connect-ED and how they may be sustained.

Towards the end of the quarter, follow up meetings were also held with the Ministry of Education and Sports officials to seek policy review on cost sharing to allow students to pay computer lab fees. Discussions were going on at the MOES about cost sharing and a meeting was held on the same issue in June 2004. The meeting chaired by the Director of Education and attended by PTC principals. During the meeting the Commissioner presented a paper suggesting payment of certain services by students. Among the services suggested were computer lab fees. The resolutions of the meeting were written in a paper that was presented to the Permanent Secretary. The commissioner is optimistic that the government would accept cost sharing and let students pay computer lab fees.

2.0   RESULT #3: KYU IT STRATEGY

By the end of Connect-ED Phase II, KYU[1] would have a well-articulated IT strategy for long and short-term implementation. Like Result #1 and #2, a consultant was hired to work on this result. The IT Strategist (Apollo Kyeyune) would work with KYU and the local team to establish an ICT Policy (ICTP) and an ICT Master plan (ICTMP) by 11th June 2004.   It was anticipated that the policy and master plan would provide a starting point for Kyambogo University on the path to integrating ICT in all its functions and operations.

During the past quarter, ICT Policy (ICTP) and ICT Master plan (ICTMP) document was completed. The document was developed during several Senate meetings that were held to model the ICT policy and master plan. The KYU ICT Committee and IT Strategist (Apollo Kyeyune) developed the document that was reviewed during the senate meetings. The senate meetings were attended by top Management of the university including the Vice Chancellor,

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[1] KYU: Kyambogo University

University Secretary and Heads of faculties and Departments.

The document highlighted priority areas of the different systems and phases in which the strategy shall be implemented. The ICT committee to ensure equal representation from all the Departments collected views from each Department. The consultant is transforming the document into a project document that Kyambogo University may use to seek funding from donors for implementation.

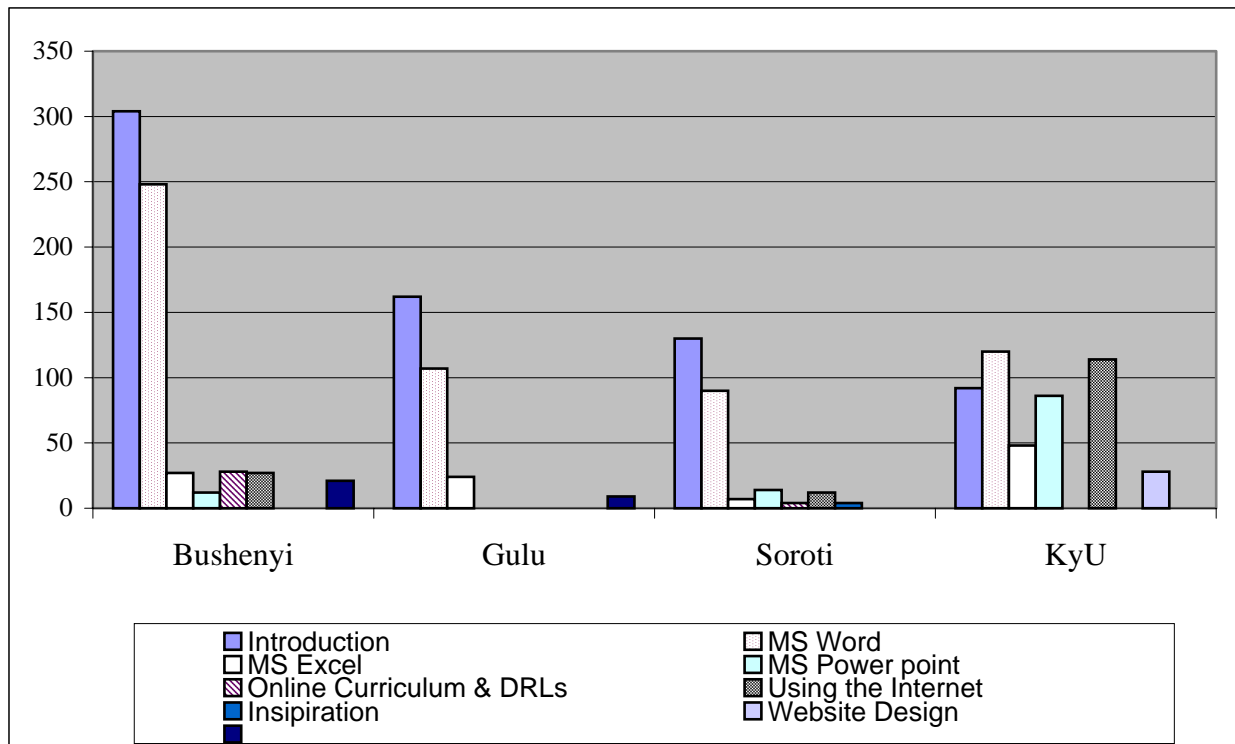## 3.0   RESULT # 4: CONTINUING TRAINING KYU AND PTC STAFF IN THE USE OF TECHNOLOGY

Aside from continuing training of tutors, students and other educators at the PTCs as was the case in Phase I, result #4 also requires training tutors and other educators to use technology to increase student centered learning. This will involve champion teachers taking Harvard University's "Teaching to Standards with new Technologies" distance education course. This activity has not taken place yet but teachers and other educators have continued to undergo training in using technology.
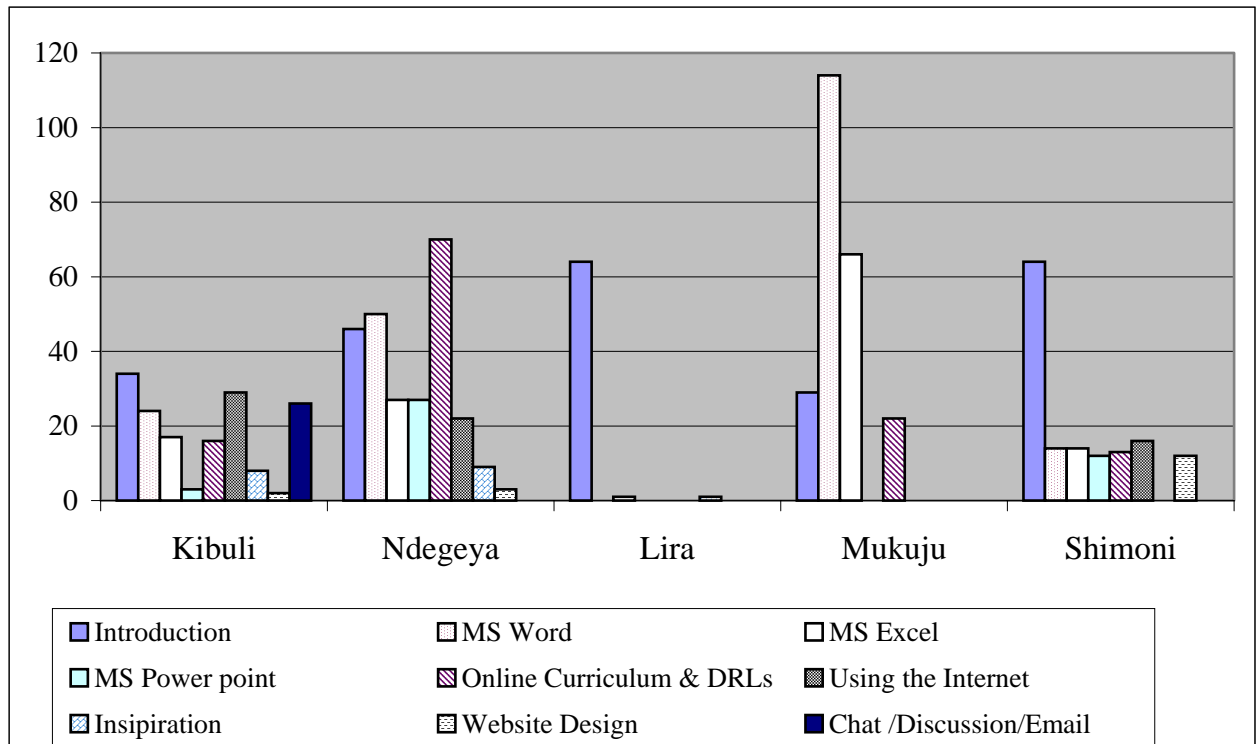
The training covers the following modules:
- Introduction to computer basics (Sessions I to V) – 10hrs (each session is two hours)
- Microsoft Word – 8hrs
- Using the Internet: This covers the use of the Professional Development Learning Environment, Online curriculum & the Digital Resource Libraries (DRLs) all developed by the project. It also covers use of search engines, use of collaboration tools and use of email for communication. It takes 8hrs
- Ms Excel – 6hrs
- Ms PowerPoint and use of technology to create transparencies for overhead projectors – 6hrs
- Inspiration – 4hrs
- Website designing – 4hrs (this module is for champion tutors)

3.1   Training Students and Tutors At PTCs

Training continued to take place at the colleges in the use of technology for improved teacher training. Training took place at all PTCs. The training targeted students, tutors and CCTs at each of the six colleges. The training is structured to follow the Professional Development Learning Environment (PDLE) with each trainee covering a minimum of 40hours of facilitated training and the trainees have access to the lab to practice during their spare time. The graphs below indicate the training numbers for each module at each of the centers.

■ Introduction	□ MS Word	□ MS Excel
□ MS Power point	▨ Online Curriculum & DRLs	▦ Using the Internet
▨ Insipiration	▥ Website Design	■ Chat /Discussion/Email

Canon Lawrence registered a limited number of trainees this quarter following a long spell without training. Trainees at Ndegeya and Kyambogo strike a balance between training all modules as compared to their counterparts in the other centers.

4.0 RESULT # 5: INCREASED CAPACITY OF TUTORS AND PRE-SERVICE TEACHERS TO DESIGN AND DEVELOP EDUCATIONAL RESOURCES AND CONTRIBUTE TO ONLINE VERSIONS OF THE TRAINING CURRICULUM

Within this result, tutors, CCTs and students at PTCs would have further capacity to create educational resources using computer and Internet technology and contribute to the development of the online curriculum. This would involve activities such as the documentation of content creation process and demonstration of educational resources from each of the 8 PTCs.

During the past quarter, David Kawumi and Phoebe Kyomukama were at Bushenyi where they facilitated a mini workshop. During the workshop, tutors were organized into ad hoc subject matter groups where they were trained in development of resources for the curriculum subjects. The sessions emphasized on creation of educational resources to enhance the teacher-training online curriculum.

The participants who included 9 CCTs and 9 pre-service tutors showed a lot of enthusiasm and were committed to the training. The tutors were keen and some content was gathered in all subjects including Science with health Education, Social Studies, Mathematics, Language Education, Music, Physical Education and Cultural education. All subjects were represented except Religious Education.

During the workshop, the tutors discovered how rich the enhanced online curriculum was and were happy to be contributing to it. The contribution of the CCTs may not be sustainable and much because they spend less time at the PTCs but they would remain Connect-ED's major target audience since they are directly linked to the primary school child. Nonetheless, more

emphasis would be made in training to use technology for practice.

A number of challenges were faced during the workshop at Bushenyi PTC. They included:
- The CCTs had basic computer skills since they spend very little time at the Colleges. However, they met and discussed the best way to get more training which was an indication that they were giving the training a lot of thought.
- Printing was a problem since the printer at the College broke down

All in all, the absence of the CCTs' from the PTC most of the time would impact their contribution to the curriculum negatively. However, they learned a lot and they demonstrated that they would share information with teachers in the primary schools.

On a similar note, Mr. Charles Kalinzi a lecturer at KYU volunteered to contribute to the online curriculum and will be trained by one of the content specialists. Mr. Charles Kalinzi developed content for one unit in Maths Education. Connect-ED continues to welcome educators to contribute contents for enhancement of the online curriculum in Physical Education, Art, Religious Education, Science, Mathematics and Music.

5.0 RESULT # 6: FULLY DESIGNED PTC WEBSITES WITH A MAINTENANCE STRATEGY

This result involves training PTAs and counterpart to create websites and identify a content committee at each PTC which will be responsible for providing content updates to the website while the PTAs act as web masters. Within the same result, Connect-ED would develop a web maintenance strategy for each of the eight PTCs, conduct follow up training in website maintenance as well as carryout training sessions with tutors and educators in instructional design to emphasize on customizing, or creating educational resources using instructional design process to enhance their teacher training materials
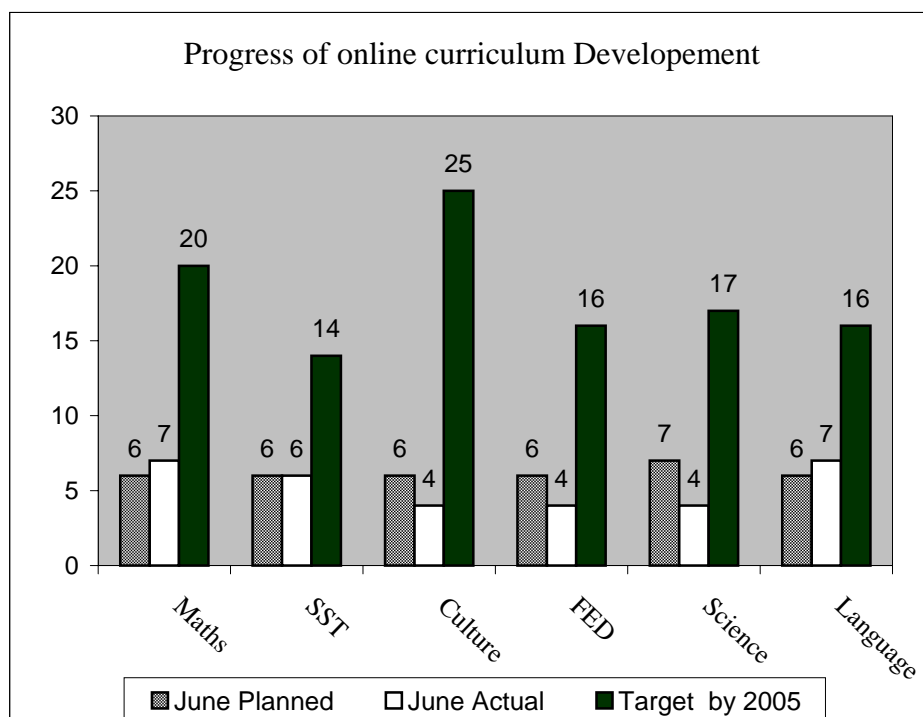
During the past quarter, a website training manual was developed and tested at the PTCs. Using the training manual, Hawa Nyende held training at Mukuju PTC, Ndegeya, Soroti and Bushenyi PTCs. During the training she held train the trainer sessions with the PTAs and champion tutors in developing educational websites and PTC website maintenance strategy. The participants spent two days training on creation of educational websites using Dreamweaver MX. Website maintenance committees were set up at Mukuju, Ndegeya, Soroti and Bushenyi PTCs.

At Ndegeya PTC, Ms. Nazziwa Robinah a Music tutor is championing and has demonstrated the impact of the training by designing her own website and uploading it at http://itek.ac.ug/ndegeya/nazziwa/music.

6.0 RESULT # 7: DEVELOPMENT OF MORE ONLINE CURRICULUM UNITS

One of Connect-ED's primary objectives was to enrich primary education through the use of new information technologies in the education system, which included development of an online curriculum for student teachers. The implementation of this result involves review and

further development of content from tutors during the mini workshops in result #4 by the content team before the technical team enhances it. The charts below show the progress of development and the planned against actual units developed by the end of the quarter.

Progress of online curriculum Developement

Legend: June Planned, June Actual, Target by 2005

Subject	June Planned	June Actual	Target by 2005
Maths	6	7	20
SST	6	6	14
Culture	6	4	25
FED	6	4	16
Science	7	4	17
Language	6	7	16

SUBJECT AREA	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6	Unit 7	Unit 8	Unit 9	Unit 10	Unit 11	Unit 12	Unit 13	Unit 14	Unit 15	Unit 16	Unit 17	Unit 18	Unit 19	Unit 20	Unit 21	Unit 22	Unit 23	Unit 24	Unit 25
Math	X	X	X	X	X			X	X																
Social Studies	X	X	X	X				X					X												
Cultural Education	X	X									X		X												
Foundations of Education	X	X	X	X																					
Science with Health	X		X	X				O			O	X													
Language	X	X	X					X	X	X	X														

LEGEND	
completed & uploaded	X
In the pipeline ready mid July	O

7.1 EQUIPMENT STATUS

Most of the equipment is in good working order at all the centers except for a few cases. The table below summarizes the equipment faults and the actions as they happened at the different centers in this quarter.

Center	Equipment Problems and actions
Lira	- Two monitors are not functioning and were taken to Bushnet but the repairs are not complete. - Two UPS systems are not receiving power. - One AC stopped working after a spark. - The low power problem needs to be rectified by the electricity Distribution Company.
Ndegeya	- A pair of speakers is not working - One of the monitors is not working. - One UPS needs a battery
Mukuju	- One UPS needs a battery - The print server that doesn't work - There is no connectivity to date.
Soroti	- One UPS is not working - One monitor is not working - The digital copier doesn't receive power.
Shimoni	- The print server does not power on - Two computers need the CMOS cells replaced because they loose time and I have to update it every time they are started in order for them to word. - One UPS needs a battery
Kibuli	- Low RAM on some of the computers - 5 UPS system need new batteries - Kibuli received a new Laser jet printer as replacement for old printer that blew earlier on.
KYU	- Three faulty monitors

	-	The LCD projector lamp blew
	-	Four computers are not functioning
Gulu	-	The LCD projector does not display clearly
	-	One monitor needs to be repaired.
Bushenyi	-	The LaserJet printer is not working.

General Equipment Status:

- All the air conditioners were serviced.

- Two hard disks were procured for Bushenyi and Mukuju servers.

7.1 TRAVEL AND SHORT TERM TECHNICAL ASSISTANTS

During this quarter, two short-term technical assistants were employed as shown in the table below.

Name:	Purpose and destination
Meddie Mayanja	Sustainability, business planning and ICT operating guidelines for PTCs as in Results 1 and 2.
David Kawumi and Phoebe Kyomukama	To Bushenyi PTC to facilitate a workshop and holding training for tutors to contribute to online curriculum
Hawa Nyende	To Mukuju, Ndegeya and Bushenyi PTC to carry out training in instructional design and website design

8.0 SUCCESS STORIES

Semivule Helen, Tutor Kibuli PTC:

Introduction to ICT was a nightmare. I had a phobia for a computer use. I thought it was a waste of time learning computer until the introduction of computer lab at Kibuli PTC that opened my eyes. Now I realize that computer learning was a life necessity.

The outcome are development of new skills, acquisition of new knowledge, supplementing on my teaching/learning notes after searching from the internet, additional vocabulary and typing my notes, schemes of work and personal things. The lab is now a leisure place where free time id usually spent.

Thanks to the introduction of ICT at Kibuli Primary Teachers' College

Hellen Semivule, tutor Kibuli PTC

Kamanzi Charles, Year I Student 2003/4, Kibuli PTC

Before I had joined this computer training, in fact, I did not know anything about the computer but ever since I started learning it, I have accumulated a lot of experience in it. Most of all I can do my revision using information on the Internet. I am very sure that I will make use of it in daily life.

Anam Francis, Science/Maths and P.E Tutor Canon Lawrence P.T.C.

Connect-ED introduced me to using a computer for my work and am now able to prepare the scheme of work and lesson plans, create my work plan quickly with fewer errors, can access the Internet, I can make hand outs for my students within a short period of time. All of these things were not possible before Connect-ED. Before acquiring the knowledge of computer, I found

Anam Francis, Tutor Canon Lawrence PTC

it difficult to purchase learning materials, I had to move around with bulky lesson plan and scheme of work note books. Some materials written on paper could easily get lost or get

destroyed by bad weather unlike those ones put in diskettes when properly kept. All these have been made easy by Connect-ED.

Enang O. Mike, Canon Lawrence PTC Lira

Connect-ED has enabled me learn programs like MS Excel that have made my work very easy. As a storekeeper, I use excel to do all my Stores record. Although I don't have a computer in my office, I make it a point to go to the computer lab and I do my work which has made me more efficient and accurate and updating and correcting is possible and faster without disorganizing the old record.

Enang o' Mike,Canon Lawrence P.T.C

Before I got the knowledge of computer I was using paper and pen in all my record keeping but now I am able to do some of my work on the computers. Generally I have benefited a lot from the training.

Komakech William Johnson, year I student, Gulu

 Connect-ED has made it possible for me to access the on-line curriculum, search for information, do my assignments, and download useful information. Now I have in vision that when I qualify as a teacher in the field, the knowledge will help me in lesson planning, selecting appropriate activities for my learners, storing all my learners' performance records when I am enrolled in a school with computers.

Furthermore, the knowledge I have acquired will help me in upgrading in my profession as a teacher when I wish to upgrade.

Lalam Jackline, year I student, Gulu

Connect-ED has enabled me get access to useful information. For example one time we were

given an assignment to write 25800 into Two Significant Figures. I used Google to search and I got information that helped me complete my assignment.

Wasike Anthony, CCT Shimoni PTC

As a CCT, I have gained a lot from the Connect-ED lab. Work is now more simplified and interesting with the use of the computers to manage secretarial work. I am able to use Microsoft word in processing my work for example writing reports, making work plans, writing circulars and many

Wasike Anthonny, CCT Shimoni PTC

more works, which was a big bother before. I am able to use Excel in processing budgets, organizing spreadsheets of marks for my student teachers conveniently and tabulate information about my coordinating centre schools. All this information, I can store on the floppy disk for further reference, which was a hell of problems before the lab came into existence. With the lab connected to the Internet, I am able to use Internet in searching the most current information related to my studies and getting information to teach my students conveniently.

I.   Ms. Kasoma Sandra, Tutor Kibuli PTC

Thanks be to God who gave man wisdom to be creative. Connect-Ed at Kibuli PTC has made a difference not only in the life of a student, but a tutor as well.

For such a long time since the introduction of computers in this country, I was computer illiterate until 2002 when I joined Connect-ED trainees' camp at Kibuli PTC. I remember I knew nothing completely about computers and we were introduced to software and hardware, it was all interesting but challenging.

At first clicking was a big problem but unfortunately it was so simple. Cutting copying and pasting were chocking. I always called my trainer repeatedly complaining about my work. It was not easy at all! Today I do work with ease. I can type and format my own documents; I am able to us the Internet very well to search for information and to send messages. I can design my own slides for presentations using PowerPoint with minimum guidance though; I am not yet very fast in typing but am quite comfortable when using the computer.

Sandra Kasoma, Tutor Kibuli PTC

In conclusion, although the tasks may seem unfriendly at the beginning, when determined to learn, they soon become friendly. Listening is not good even in fact; it is as good as watching others do it. One needs to get involved by doing some work at the machines you learn a great deal. However, even then, if you do not offer frequent and challenging practice you still lag being. It is therefore not just practice that makes perfect, but PLENTY OF PERFECT PRACTICE. That is my vision.

Mr. Aisu Noel, Tutor, Soroti Primary Teachers' College

I must sincerely appreciate the impact CONNECT-ED Project has had in our Institution of

learning- Soroti Primary Teachers' College and particularly to me as an individual with assigned professional responsibilities that often call for communication through Internet or otherwise to different offices and personalities.

Aisu Noel, Tutor Soroti PTC

I feel so gratified that this Educational Innovation has come at the right time, a time when our Education system is putting more emphasis on Educational Technology and above all when any form of Professional and academic advancement in our country advocates for computer literacy. Our education curriculum design in this world of modernization has tended to be geared towards technology advancement. I feel I have gained the basic computer skills to help me compete in the field of advancement and to prepare our student teachers for the same.

I must say that I for one, I had never thought I could ever have a chance to use, let alone to understand concepts and skills of computer usage. I kept a distance from those who had this knowledge considering them " the lucky ones"; never did I ever dream that CONNECT-ED would come to my rescue.

As Examination Secretary in my college, the knowledge I have gained through CONNECT-ED has enabled me to use technology in my work. More specifically, I compiled Year One entry performance at "O" Level and Grade III Final Year performance at the end of the Course from 1998-2004 as required by the Ministry of education and Sports using the computer.

I compiled analysis of end of term examinations and continuous assessment records for every tutor that were submitted to the Principal, designed admission lists, class lists, remedial and orientation programmes for the teaching staff and students.

I can surf the Internet for information to enrich my teaching and be well informed of what happens in the outside world. This has also helped me get relevant up to date information for my students and colleagues.

I joined the Global learning Portal which has enabled me shared experiences with people from other parts of the world and we exchanged ideas on important topics like; HIV/AIDS, Literacy and Technology in Education.

At the moment the College Principal has directed all tutors must produce their schemes of work and work plans typed using a computer. This is no longer a problem for me and I can even assist and encourage my fellow teachers.

Thanks to CONNECT-ED Project.

Mr. Alloch William Akoll , Tutor Soroti PTC

The Connect-ED project since it came to existence in Soroti PTC has changed my life in many ways. Before Connect-ED, I used to wonder about computers, I longed to have chance one day in handling and using a computer!

Time has really come, now I have given much in to computers and it makes me happy when I am now able to type all my departmental proposals, budgets, end of term and end of year reports, type all my subjects schemes of work and lesson plans and I am now using ICT in my professional tasks.

Alloch William Akoll , Tutor Soroti PTC

Much of the reference work for me now is done from the Internet. I am able to enhance my teaching notes using content from Internet. I used to think that there was

only one programme on the computer but I later discovered that many other programmes even make my work much easier and better. For example PowerPoint, Paint, Inspiration and others have enriched my productions for teaching and I discovered more ways of presenting information either in prose or diagrammatical or pictorial which are my teaching subjects.

The computer Lab has widened my skills of presentation. With PowerPoint, I am able to summarize bulky information and deliver it to a much larger group of people within a shorter time. I discovered that people prefer such presentations to lectures where one talks and chalks or uses marker pen and sugar paper.

Richard Wanzala, Mathematics tutor Ndegeya PTC

Many different teachers have taught tutors, lecturers and me but I have not found a teacher like a computer. A computer is a teacher who is flexible and tolerant at all times. It is a matter of clicking and switch on to what you want let it be subject, topic or sub topic and you start learning. You ask a question it will be answered with a lot of kindness i.e. more will be given to you on the topic.

It is a library, which contains all knowledge you may want, it has updated my knowledge and understanding. Many topics which lacked reference books in our college library are easily taught using the computers, you either put in DRLs, Online curriculum or search on the Internet. I have used the computer to teach some topics like the circle properties and it was the best lesson, which excited my students, as it was a matter of touching the mouse. It has made my learning/teaching more real, practical, lively and interactive.

The computer has also made me get in touch with outside universities like Oral Roberts, Liverpool University and many others. My sincere thanks goes to the Connect-ED for providing us with the best teacher of our generation.

Beatrice Karuma, Shimoni Core PTC

I wish to extend my heartfelt thanks to the people who introduced me to computer skills, which I never dreamt I would have. In addition to that, I am grateful it is free of charge! I have now acquired skills in Internet use; I have an email and can now communicate with friends. I used to disturb the college secretary to type for me my work but now I do it myself. This has improved confidentiality of matters. Thanks to the ConnectED

Beatrice Karuma

Rev. Richard Milton Ochola, Art and crafts and Religious, tutor Canon Lawrence P.T.C.

About five years ago, I didn't know what a computer was. I used to see it from distance and confuse it with a television. But now I have known the computer through the connect-ED project. I can now use the computer to type my documents, notes, pamphlets, making timetables etc. My computer skills have stimulated me into book/magazine writing e.g. Youth Convention for Church of Uganda, producing calendar for the year 2004, making posters, using the painter tool in the computer to paint my art work, teaching using a projector and using the Internet for communication and getting useful information.

Before the acquiring computer skills, I would make calendars using pens and papers, markers and cut photos to put on the calendar, my posters were hand made, I used to use books, dictionaries, encyclopedia. Now I can do all that work using the computer and I get useful information from the Internet. Thanks to Connect- ED project for this useful technology.

Okene William, Music and language tutor, Canon Lawrence P.T.C.

Connect-ED training has been so useful to me. I can now produce teaching notes by typing them rather than hand written, search for information from the Internet, produce handouts, schemes of work, lesion plans. I participate on online discussions using the GLPNet and the chat room.

The online curriculum is good source of knowledge for updating my subject matter in Language and Music.

Alloch William Akol, tutor Soroti PTC

I am happy to acknowledge that I have had more experience with computers. During our Continuous Professional Development (CPD) training in the college we were able to use, "PowerPoint in our presentations" to conduct the training.

Alloch William

Personally, I was overwhelmed but it was instead a surprise to all the staff members including the college Administrators to realize that we could use such a facility in our college, more surprising is discovering that such a powerful facility has existed in the college!

This was one of our best-attended CPDs ever conducted because attendance was maintained constant from the first day to the last one. You know what? All college Administrators got induced to use this facility and they were very much overwhelmed.

The greatest achievement we recorded from this facilitation using PowerPoint is that tutors who have been reluctant were encouraged to come for training. Attendance for the following Saturday was better than usual.

Thank you Connect-ED.